

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 63-300699

(43)Date of publication of application : 07.12.1988

(51)Int.Cl.

H04R 3/14

(21)Application number : 62-133476

(71)Applicant : PIONEER ELECTRONIC CORP

(22)Date of filing : 30.05.1987

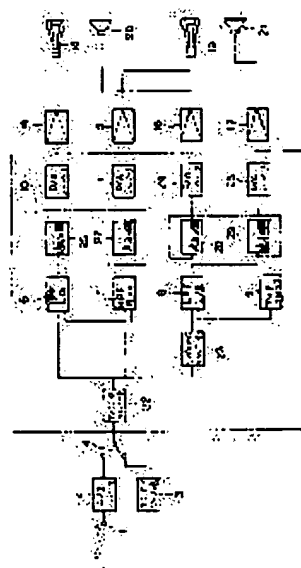
(72)Inventor : YAMAMOTO KAORU  
AZUMA SHUJIRO  
KANDA JUN

## (54) NETWORK FOR MULTI-WAY SPEAKER EQUIPMENT

### (57)Abstract:

**PURPOSE:** To realize desired phase and amplitude characteristics with a scale of a small circuit by providing a cyclic filter correcting the phase characteristic of a speaker unit and a noncyclic filter correcting the amplitude characteristic of the cyclic filter.

**CONSTITUTION:** A sampling converter 23 converting a clock frequency of a digital signal inputted from a switch 4 into a lower clock frequency is connected to a low-pass filter 8. D/A converters 24, 25 converting the said low sampling signal are connected to the post-stage of the filter 8. Moreover, the high-pass filters 6, 7 consist of the cyclic filter correcting the phase characteristic of the speaker unit and the noncyclic filter correcting the amplitude characteristic of the cyclic filter. A digital signal whose time base is corrected by delay circuits 26~29 is converted into an analog signal by D/A converters 10, 11, 24, 25 and amplified by amplifiers 14~17 and fed to speakers 18~21.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of